

WHAT IS CLAIMED IS:

1. An arrangement adapted to connect a tubular element to a body extending into the tubular element, comprising:

a tension ring adapted to embrace, by an inner surface, an outer wall of the tubular element, the tension ring adapted to extend axially along the tubular element and adapted to apply a clamp force to the tubular element so that the tubular element acts via an inner wall of the tubular element on the body extending into the tubular element to clamp the tubular element;

wherein the tension ring is adapted to rest by only a first axial partial section of the inner surface against the outer wall of the tubular element and is adapted to exert a clamp action on the outer wall of the tubular element.

2. The arrangement according to claim 1, wherein the tubular element includes a hollow cylinder.

3. The arrangement according to claim 1, wherein the body includes a cylindrical element.

4. The arrangement according to claim 1, wherein the tension ring includes at least one second axial section contiguous in an axial direction to the first axial section, the at least one second axial section configured so that the inner surface of the tension ring does not rest against the outer wall of the tubular element.

5. The arrangement according to claim 4, wherein an extent of the at least one second axial section in the axial direction is greater than an axial extent of the first axial section.

6. The arrangement according to claim 4, wherein the inner surface of the tension ring in the at least one second axial section has a greater distance from a center axis of the tubular element than in the first axial section.

7. The arrangement according to claim 6, wherein the tension ring includes a cut-out in the at least one second axial section, the at least one second axial section having a greater distance from the center axis of the tubular element than the first axial section.

8. The arrangement according to claim 4, wherein a distance from a center axis of the tubular element to the outer wall of the tubular element, in an area of the outer wall of the tubular element against which the first axial section is configured to rest, is larger than a distance from the center axis of the tubular element to the outer wall of the tubular element in an area embraced by the at least one second axial section.

9. The arrangement according to claim 8, wherein, in the area against which the first axial section is configured to rest against the outer wall of the tubular element, the tubular element includes one of a thickened region and an outwardly projecting protuberance.

10. The arrangement according to claim 1, wherein the tension ring is configured to be arranged at an unattached end of the tubular element.

11. The arrangement according to claim 10, wherein the first axial section is configured to face an end face of the unattached end of the tubular element.

12. The arrangement according to claim 10, wherein, at an end face of the unattached end, the tubular element includes an outwardly protruding projection.

13. The arrangement according to claim 10, wherein, at the unattached end, a wall of the tubular element on which the tension ring is to be positioned includes a smaller thickness than in a contiguous axial region of the tubular element.

14. The arrangement according to claim 13, wherein the tubular element includes a shoulder in a transition area from an axial region of the unattached end to the contiguous axial region.

15. The arrangement according to claim 14, wherein the tension ring is configured to be positioned in an axial direction directly next to the shoulder.

16. The arrangement according to claim 1, wherein the tension ring includes a plurality of clamp points spaced apart along a circumference of the tubular element configured to rest against the outer wall of the tubular element.

17. The arrangement according to claim 16, wherein the inner surface of the tension ring includes three spaced apart clamp points along the circumference of the tubular element.

18. The arrangement according to claim 16, wherein the clamp points include a plurality of inwardly protruding projections of the inner surface of the tension ring integrally molded on the inner surface.

19. The arrangement according to claim 16, wherein the clamp points are spaced apart at a constant, equal distance from one another along the circumference of the tubular element at the inner surface of the tension ring.

20. The arrangement according to claim 16, wherein the tension ring includes a weak spot arranged between each two adjacent clamp points.

21. The arrangement according to claim 1, wherein the arrangement is adapted to connect a hollow shaft of a rotary encoder to a drive shaft of a machine.

22. The arrangement according to claim 2, wherein the tubular element includes a hollow shaft.

23. The arrangement according to claim 3, wherein the body includes a drive shaft.

24. The arrangement according to claim 12, wherein the outwardly protruding projection is arranged as a circumferential flange adapted to axially secure the tension ring.

25. The arrangement according to claim 15, wherein the tension ring is configured to rest against the shoulder.

26. The arrangement according to claim 20, wherein the weak spot is adapted to operate as a joint.

27. A device, comprising:  
a tubular element;  
a body extending into the tubular element; and  
an arrangement adapted to connect the tubular element to the body, the arrangement including a tension ring adapted to embrace, by an inner surface, an outer wall of the tubular element, the tension ring adapted to extend axially along the tubular element and adapted to apply a clamp force to the tubular element so that the tubular element acts via an inner wall of the tubular element on the body extending into the tubular element to clamp the tubular element;  
wherein the tension ring is adapted to rest by only a first axial partial section of the inner surface against the outer wall of the tubular element and is adapted to exert a clamp action on the outer wall of the tubular element.